P. M. Arnini,

N York painter

441-A

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MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

V. Cotton

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Vitis cordifolia

July 24 1882

Weehawken N.Y.
J.E 1840

Washington
Peck 1868

442

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Vitis cordifolia

July 24 1882

opposite St Louis, H Eggert

×4

single seeds

no groove below chalaza

2.7 – 2.8 lin long

2 seeds

slight groove below chalaza

3 lin long

largest 3 seeded berries

The rostrum in all these is very marked

443

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Vitis cordifolia

July 24 1882

444

Allenton, Fowler
(St Louis G.E. with the same)

mostly incised

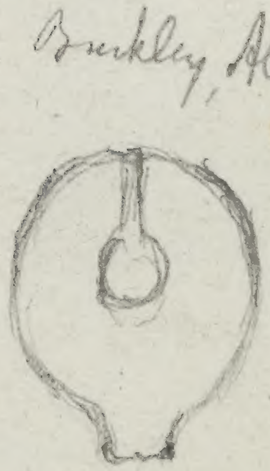
Mountains of
North Carolina
G.E

Coast of South Carolina
Millichamp

no nyphae
visible!
looks like a seed
of V. riparia

(Oxford, Miss Sykes
Holgate
is the same
or more like
the Allenton
(above)

Wabash, Schneck



Buckley, Alabama

Easton, Pa
Porter 1876

seed large, 2
chalazal flat
shape very
indistinct

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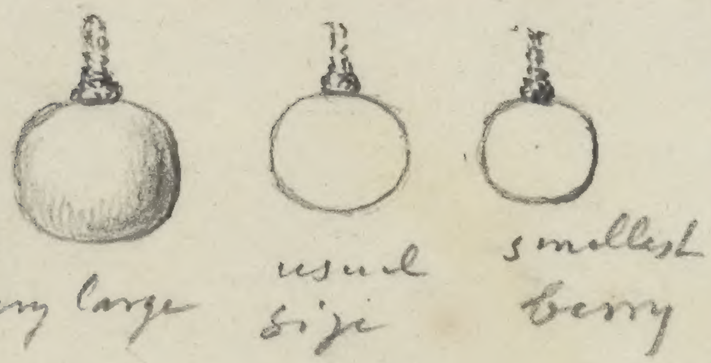
Vitis cordifolia ? Cinerea Octob 5th 1865

St Louis Market –

bunch large, loose, berries deep black, without blue bloom slightly depressed, largest 9 – 9½ mm diam & 8 mm high, smallest 6½ diam, 6 mm high – average 7 mm high and 7¾ or 8 mm diam. – All those, I examined have one or two seeds, never more – Pedicel 4–5 lines long, warty

Pulp juicy and pale red, not as fleshy and green as in Summergrape, acid, but not adstringent not unpleasant

(over)



only two seeds in the berry (or one)

445

this must be the form of Winter grape with pubescent leaf a hybrid of aestivalis and cordifolia — or an intermediate form, it never has the black currant (or bug-) taste of the real smooth leaved Winter grape

MISSOURI BOTANICAL GARDEN
GEORGE ENG[illegible]

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APOTHECARY & PHARMACEUTIST,
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Botanical Gazette.

Vol. VII. NOVEMBER, 1882. No. 11.

Editorial.—In the October *Naturalist* J. B. Ellis and Dr. Geo. Martin describe 13 new species of fungi, 5 of which belong to the genus *Cercospora* and 4 to *Sphæria*.

A solution of caustic potash brings out clearly to the unaided eye the presence of the concealed chlorophyll in the red beet leaf, thus making it a good class illustration.

One of the best plants in which to observe the presence of starch in the chlorophyll masses is *Spirogyra*. There is no necessity of discharging the chlorophyll but the iodine test can be applied at once bringing out beautifully the rich starch contents.

Miss M. Bockee Flint, of Adrian College, Michigan, has just been observing the capsules of *Hamamelis Virginiana* discharge their seeds. A branch lying upon her table and drying rapidly, the capsules began to discharge and the shining black nutlets were sent upward to the ceiling, a distance of at least twelve feet.

Mr. H. W. Preston, in the November *Naturalist*, gives an account of a botanical excursion to Mt. Mansfield and Smuggler's Notch, Vermont, which is enough to make our collectors turn green with envy. Those of us who cannot visit these interesting places must content ourselves with the very beautiful specimens of Messrs. Pringle and Hosford.

In some of our horticultural journals a plea is being made for the cultivation of the much abused dandelion. Not as a pot herb, for this is already done, but as a brilliant flower, that can be made to show its bright gold when everything else is held in by the winter's chill. Success to our humble friend! and when we have ridden our own lawn of its myriad roots we too may be tempted to cultivate it.

In the *Torrey Bulletin* for October, Mr. E. L. Greene describes some more new western plants, one of them being a new genus of *Compositæ* and named *Holozonia*. This plant has been long known imperfectly and has been placed under both *Hemizonia* and *Lagophylla* under the specific name of *filipes*, but upon obtaining complete specimens Mr. Greene decides that it can belong to neither of these genera and the new one is proposed.

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IT IS WITH REGRET that we have to record the death of one of our well known botanists. Mr. Elihu Hall, of Athens, Ill., died on the 24th of September last, at the age of 60 years. Mr. Hall's name is very intimately associated with many of our Rocky Mountain plants, the collection of Hall and Harbour in 1862, being among the richest in new species ever made. He botanized extensively in both Texas and Oregon, and in the second volume of the GAZETTE he published quite an extended list, with notes, of the "Arboreous, Arborescent and Suffruticose Flora of Oregon." The frequent appearance of the specific name *Hallii* among our western plants will ever be a reminder of him and his work, a reminder which he would most appreciate, his name linked with the plants he loved so well.

DR. JOHN A. WARDER, President of the American Forestry Association, has just issued a pamphlet bearing the title "Woody Plants of Ohio." In this work he has been assisted by Davis L. James and Joseph F. James, of the Cincinnati Society of Natural History. Dr. Warder is an old and skillful forester and few men have so intimate a knowledge of the "tricks and ways" of our woody plants. Having been fortunate enough to drink inspiration from Nuttall himself, he has never lost it, and is ever anxious to impart his great practical knowledge to others. He has conceived rightly that there is dense ignorance among farmers as to trees and this pamphlet is ostensibly addressed to this class, for the purpose of instruction, but the numerous notes are of great value also to the scientific botanist.

PROF. G. BRIOSI, of Rome, announces the discovery of a new organ upon the germinating plant. It consists of a collar or ring from which develop the equivalents of long "root-hairs." This "annulus" appears at the junction of the caulicle and root. The discovery was made upon the germinating seeds of *Eucalyptus globulus*. This organ is, of course, by no means of universal occurrence and the author mentions a few species and groups in which it is found in greater or less prominence. Briosi considers the function of this collar of hairs that of ordinary root-hairs; "it is a provision for the absorption of moisture from the soil, which comes into action at a very early period in germination, before the root and its root-hairs are produced." An interesting notice of Briosi's paper is given by Dr. Gray in the *Am. Jour. Sci.* for October.

PROF. T. J. BURRILL has for some years been engaged in studying a certain plant disease, known as blight, which he concludes is caused by the presence of living organisms known by that very poorly defined name, *Bacteria*. In the last number of the *Amer. Micr. Journal* he gives a very interesting account of certain vegetable poisons which he attributes to the presence of similar organisms. *Rhus Toxicodendron* was the most carefully observed and in its juices were discovered swarms of active bacteria, which

Missouri Botanical Garden

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Vitis cinerea July 24 1882

×4

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Notes taken at Adolf Engelmann's Jan 4-6 1874

Alway (an aestivalis) has stamens only little longer than pistil

Acoreux (also an aestivalis) now in flower, together with Rulander — has a large loose (long joints) yellowish or paler, foliage, bunches of aestivalis, good long stamens, small berries

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crust; stratum of tubules occupying about a third of the pileus, ferruginous within, their mouths very small and covered but not closed with a white powder. Spores ferruginous, elliptic-ovoid, .008–.001 mm. long by .006–.007 mm. broad.

Pileus projecting 2–4 in. with a breadth of 3–6 in. and a thickness at the base of $\frac{3}{4}$–$1\frac{1}{2}$ in. gradually thinning out all round to the edge. This species is properly always annual; there are indeed stratified specimens of two or three years growth but in all cases a new stratum of hymenophore is formed for each annual layer of tubules, leaving the preceding growths to crumble and decay.

Growing always about the base of old stumps in an ascending position; I have never found a specimen upon a log. I have met with the species from Dayton, O., down the Miami Valley to Cincinnati and into Kentucky beyond Lexington.

This is a curious member of the group of FOMENTARII of Fries. It has passed heretofore for *P. applanatus*, Pers., but the true *applanatus* grows here abundantly upon stumps and logs and Mr. James, Mr. Meyncke and myself readily distinguish one from the other upon sight. It will be seen that it has affinities also with *P. lucidus*, Leys.—A. P. MORGAN.

Lactuca Scariola, L.—This plant, possessing the habit of the Compass Plant in placing its vertical leaves so as to point to the poles, at the time of the publication of Gray's Manual, last edition, was known only at Cambridge, Mass. In a short time it has reached the Mississippi. It is quite abundant at Dayton, Ohio. At Put-in-Bay, Lake Erie it has already become a pest. It is beginning to make its appearance about Detroit, Mich. A few specimens (3–5) were observed by myself at Lincoln in Central Illinois. The above stations I found myself. It is in the list of H. Eggert of St. Louis, Mo. Mr. Bebb has found it at Rockford, Ill. The latter city is so close to Wisconsin that the plant probably grows there or soon will reach that state. A friend, not a botanist, but a good observer, claims to have seen the plant near Richmond, Indiana. The geographical distribution of *Lactuca Scariola*, therefore, west of the Alleghanies, would be *Ohio to Missouri and northward*.—AUG. F. FOERSTE, *Dayton, Ohio*.

The Gazette for 1883.—The attention of our readers is called to the fact that the time for the renewal of subscriptions has come. Every year has brought a large increase to our subscription list and we can assure our patrons that Volume VIII will contain much to interest and instruct. And again we would repeat to our more modest and retiring botanists what we have said so often, that while giving space to somewhat formal papers it is by no means to the exclusion of notes and scraps of information given in the most informal way.

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The co-operation of all our botanical associates is solicited in this regard, as a matter of common interest and advantage. For we are all equally concerned in forwarding the progress of the Flora of North America; and we may confidently expect from our botanical associates their sympathy, their forbearance, and their continued aid.

Albinism in Gentiana crinita.—I noticed in the window of one of our Boston city florists a few mornings ago two large bunches of white fringed gentian, and on enquiry learned that they came from Middlesex County, Mass. The petals of the open flowers were creamy white, and the face had a beautiful satiny lustre.

Later my friend Storrow Higginson informed me that he had seen in another florist's window white gentians that were gathered in Brookline, Mass. Mr. Higginson procured a specimen for analysis, but could not find any other difference between it and the normally blue flowers. He commented, however, on the perfect whiteness of the fringe.

I do not now recall any previous mention of albinism in this flower, although it may have been recorded. I have not time at present to look it up, but in any case a record of the present instances may be of interest.—GEO. E. DAVENPORT, *Medford, Mass.*

Trifolium hybridum, L.—On reading, in the October number of the GAZETTE, Mr. James' note on this species of *Trifolium*, I thought it might be of interest to note, that in Western Canada it is not at all uncommon, and about London I find it plentiful. It occurs not only in old fields and along fence sides, but I have found it in woodlands and along the borders of cedar swamps at quite a little distance from any cultivated ground, showing that here at least it has become pretty firmly fixed.

In a synopsis of the Flora of the Valley of the St. Lawrence and Great Lakes, published by Profs. Macoun and Gibson, in the Canadian Journal for January 1877, it is catalogued as "Introduced. Cultivated fields and along fences. Is very extensively cultivated in the West instead of *T. pratense*."

It is also reported from Eastern Canada in the vicinity of Ottawa, in the proceedings of the Ottawa Field Naturalist's Club for 1879 and '80, and in a letter just to hand from Prof. Macoun, he tells me that he found this species of *Trifolium* growing most luxuriantly at the foot of the Schickshook Mountains, Quebec, in the vicinity of an old camp, thirty miles from any cultivation.—T. J. W. BURGESS, M. D., *London, Ontario, Canada.*

A New Polyporus.—POLYPORUS RENIFORMIS, n. sp. Pileus sessile or substipitate, reniform or dimidiate, ascending, concave above and convex below; the surface ferruginous, concentrically sulcate and subzonate; the margin thin and acute; the context ferruginous, soft, floccose, covered with a thin rigid rather elastic

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Febr 1875

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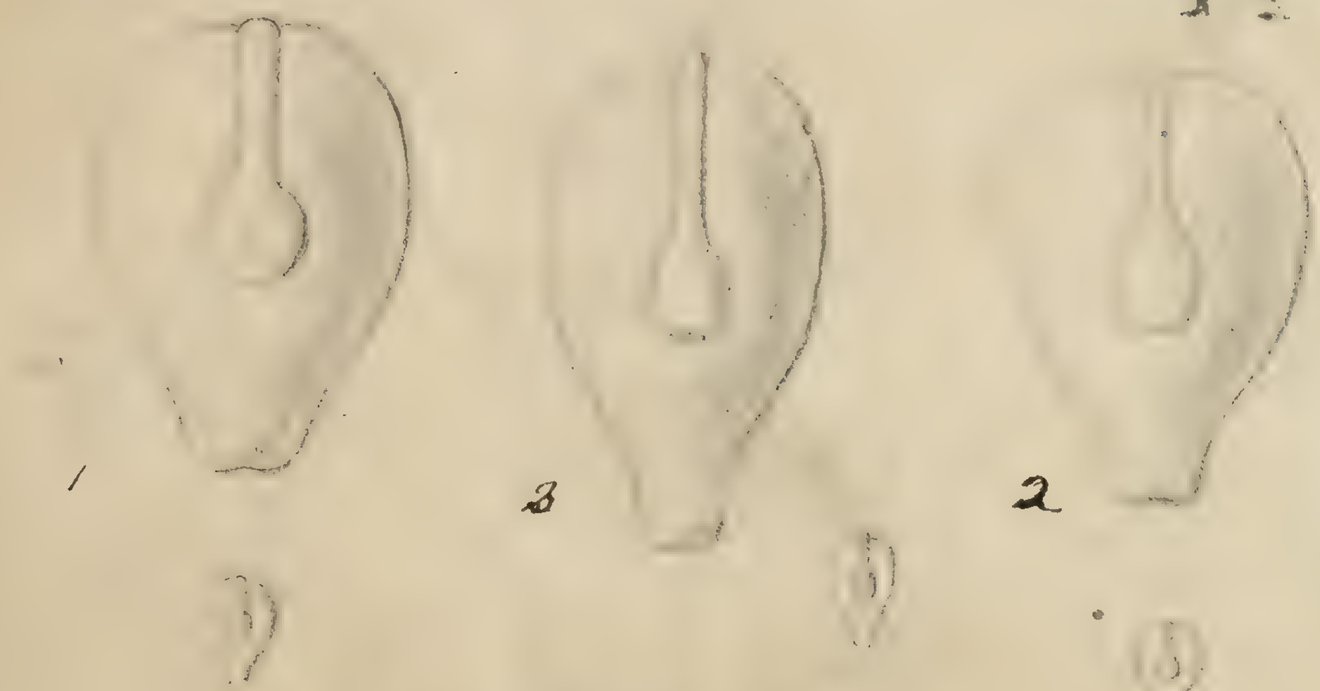

Vitis aestivalis
Thomas

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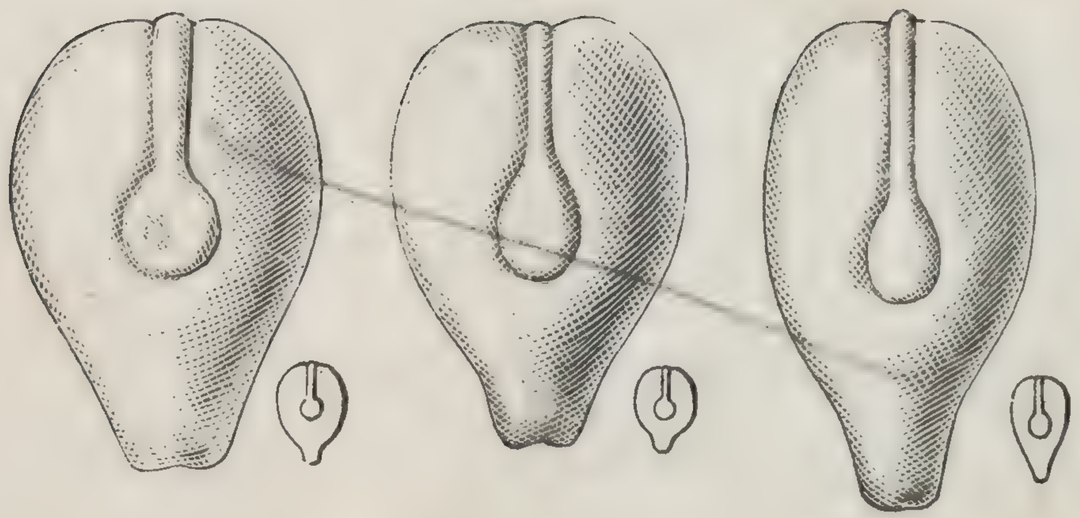

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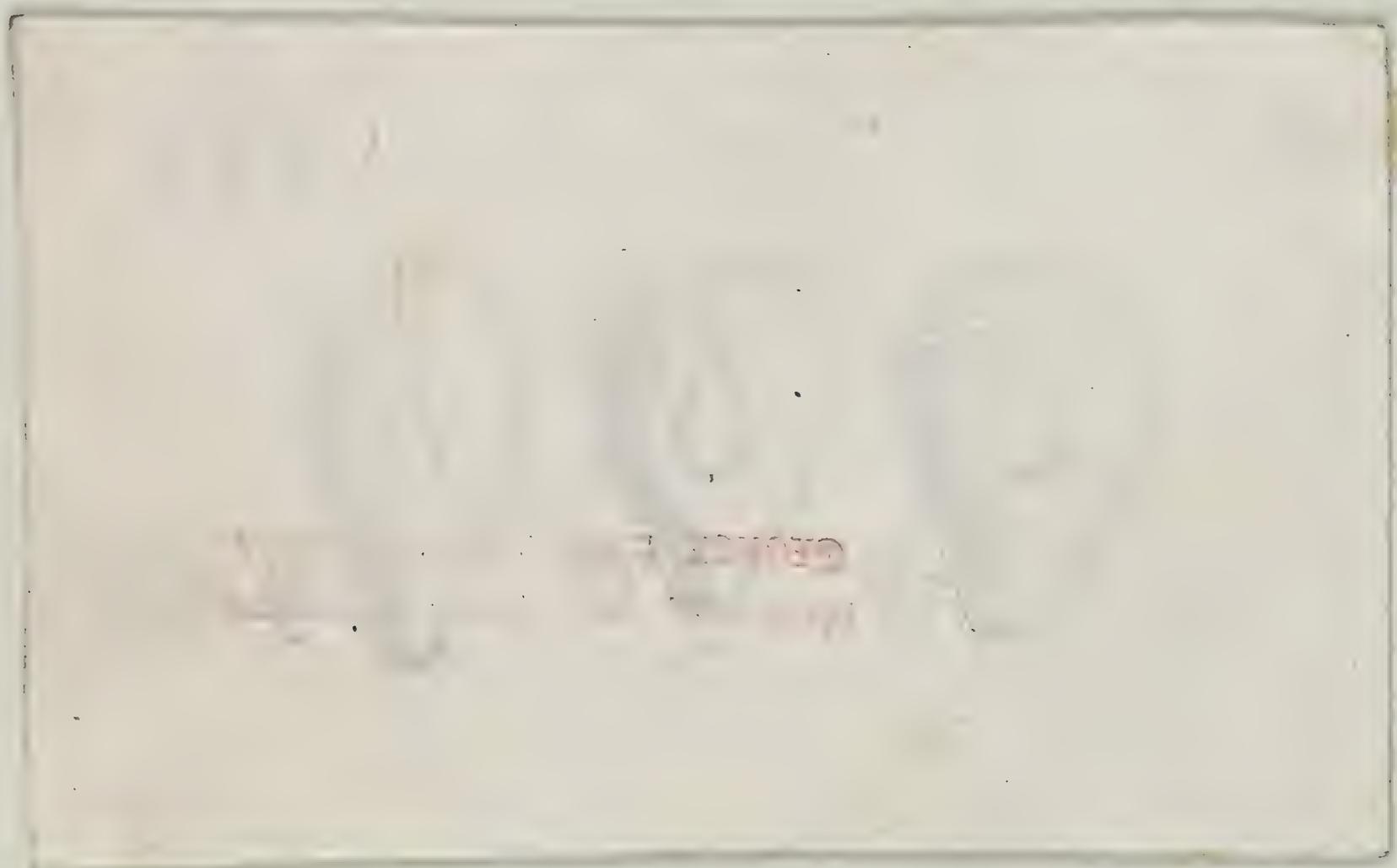

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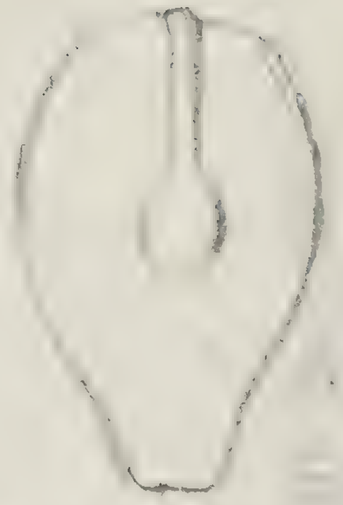
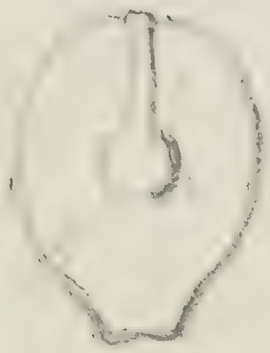
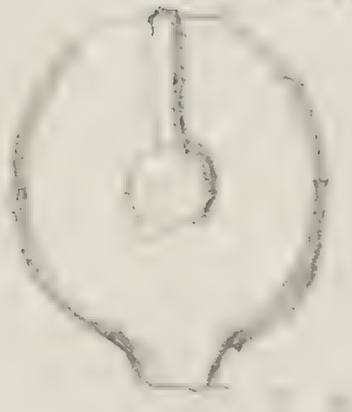
Vitis aestivalis







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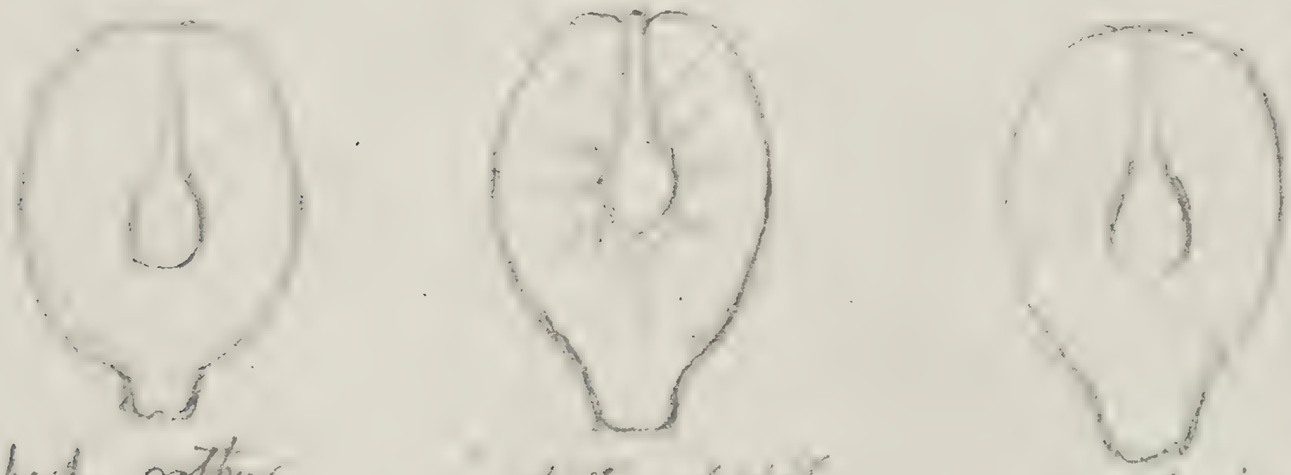
Vitis aestivalis July 24 1882

from the Hot Springs, Ark, 1866 cult at Glasgow's, St Louis

× 4



rhaphe rather indistinct

vista slightly undulate

raphe faintish

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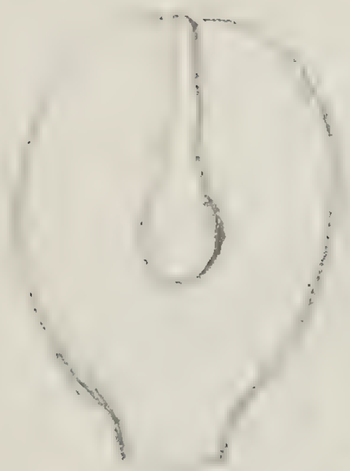

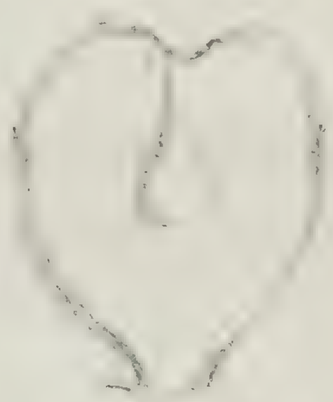

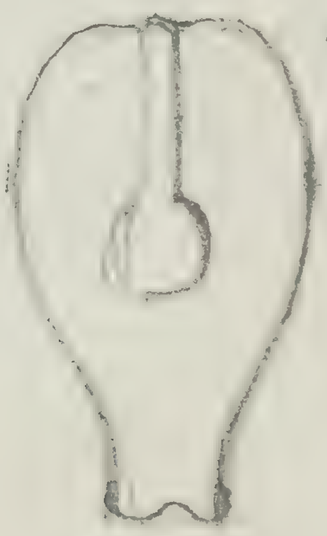

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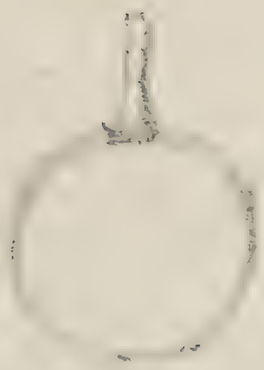

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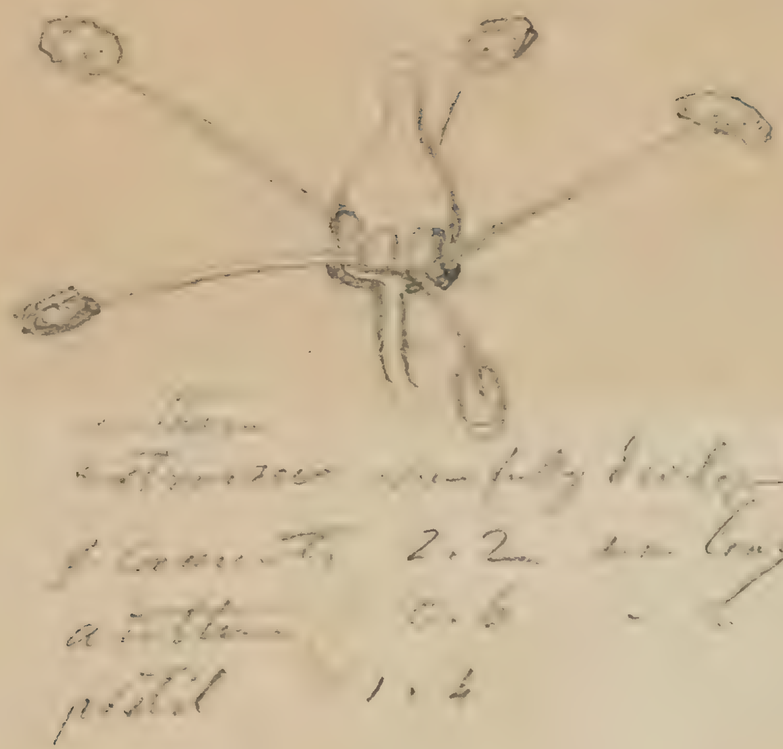

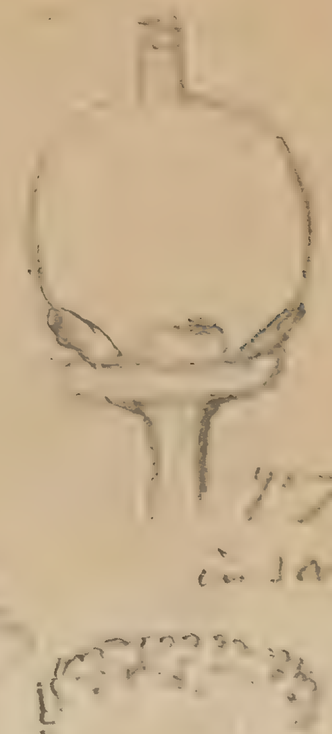

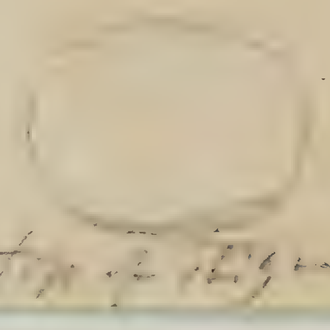

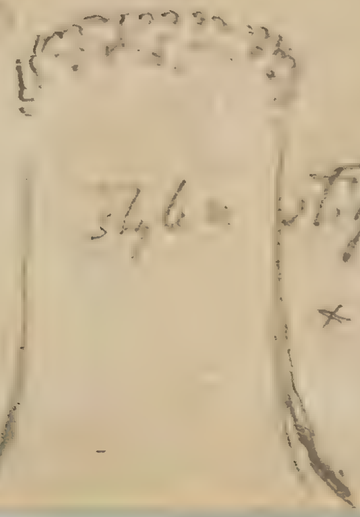

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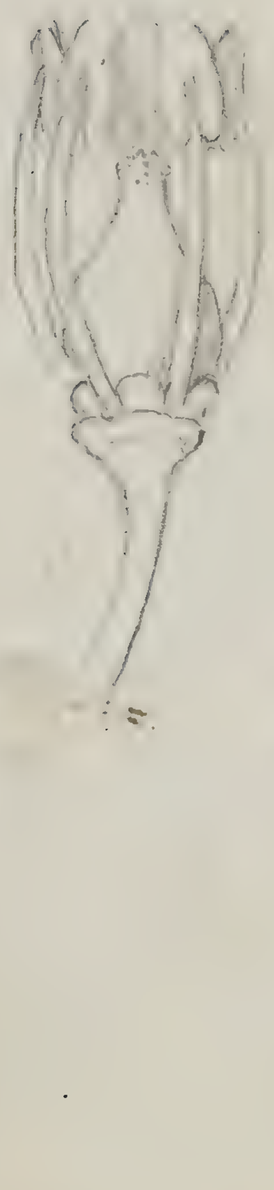

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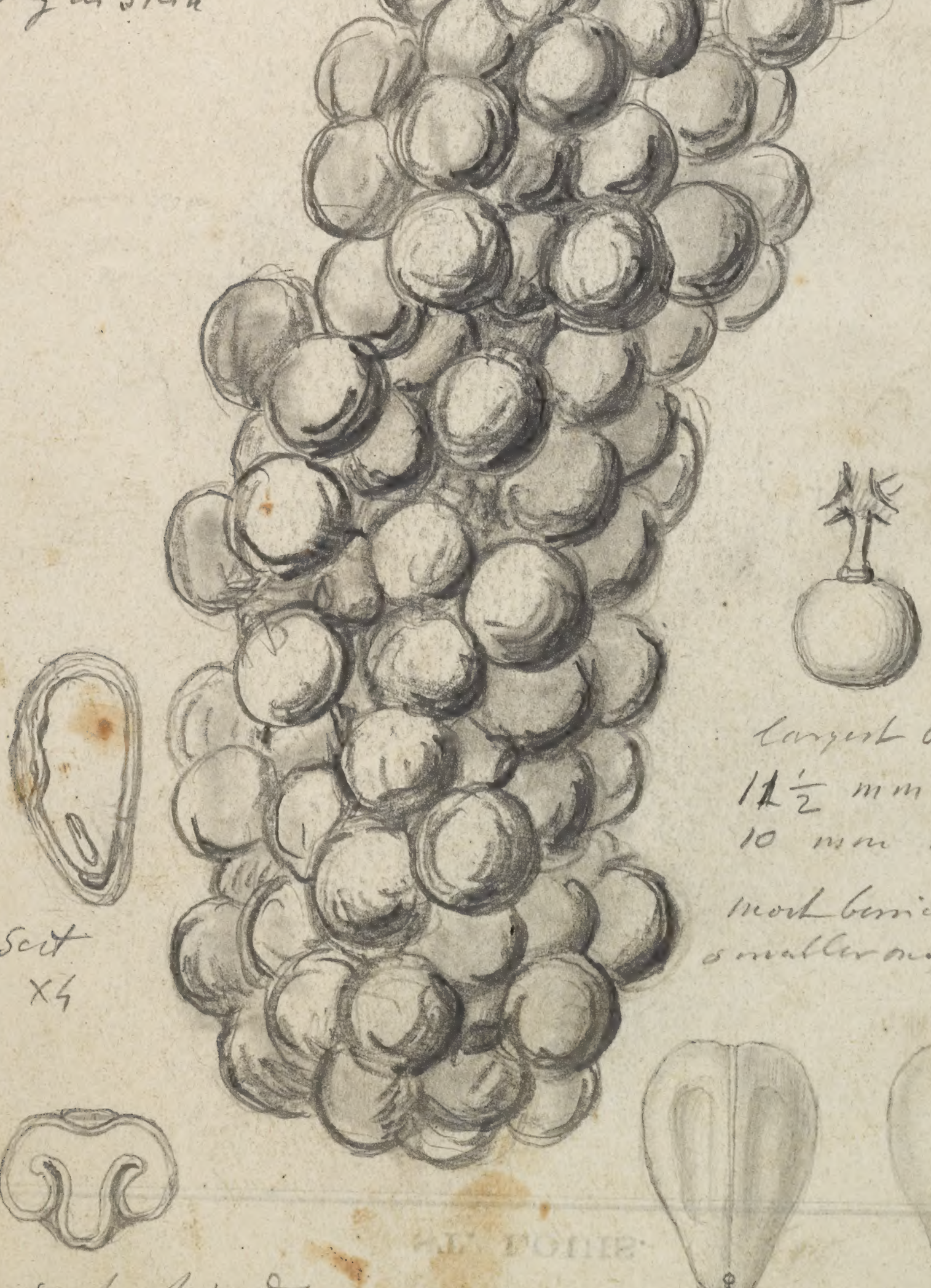
V. hyemalis

Sept. 11 1865

in St Louis Market, wild grape

berry black, with
a blue bloom
pulp fleshy greenish
Coloring matter
only in skin

457



Sect
X4

Largest berries
11½ mm ± diam
10 mm high

most berries 10
smaller ones 9 mm
diameter

sect of seed
through middle
X4

one of 4 seeds X 4
6 mm long 4 mm wide

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SOUTH-EAST CORNER FOURTH AND MARKET STREETS,

ST. LOUIS.

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MISSOURI BOTANICAL GARDEN

Vitis aestivalis

Octob 26th 1865

458

in St Louis market

largest berries seen

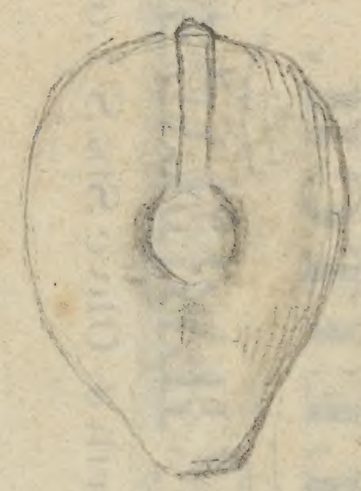
average berries 10-12 mm in diamet

14 mm in transverse

12 mm in vertical diamet

x 4

from 4 seeded berry



single seed

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